

Report of IUPAC Activities 1998

1998 was an active year for IUPAC. The major events were the adoption of a Strategic Plan and the approval by the Bureau at its meeting in September of the recommendations from the Executive Committee regarding the reorganization of the Union's scientific work. This will change the management of the Union's scientific work from one based on permanent commissions to one based on projects. Details can be found on the IUPAC Web Site, <http://www.iupac.org>. The Union's regular activities continued with the publication of 23 recommendations and reports in its official journal, *Pure and Applied Chemistry*, sponsorship of 27 Symposia and Conferences in 1998, publication of 6 books, and the publication of six issues of the Union's news magazine, *Chemistry International*. High lights are noted below. Lists of published recommendations and reports, sponsored conferences and published conference proceedings are attached to this report. All of the special reports mentioned in the highlights below are available at the IUPAC web site.

- IUPAC adopted a Strategic Plan.
- The Strategy Development and Implementation Committee issued a report on the future management of the Union's scientific work.
- A joint meeting was held with the African Association of Pure and Applied Chemistry in Durban, South Africa. The report of this meeting was printed and distributed by IUPAC to interested parties.
- A report on Chemistry in Africa was written under IUPAC-UNESCO sponsorship, and printed and distributed by IUPAC.
- A special issue of *Pure and Applied Chemistry* was produced on the topic of Environmental Estrogens.
- CHEMRAWN XI was held on 15 - 20 March 1998 in Montevideo, Uruguay. The subject of the conference was "Latin American Symposium on Environmental Analytical Chemistry".
- A Workshop on Environmental Analytical Chemistry was held in conjunction with CHEMRAWN XI. The Workshop was organized by the IOCD and partly funded by an ICSU grant to IUPAC.
- The IUPAC web site was greatly expanded. The web site not only contains all the material in the IUPAC Handbook but also a list and description of the current projects being worked on by IUPAC Commissions and Committees, current contact information for members of IUPAC bodies, a complete list of IUPAC publications, title pages of recent issues of *Pure and Applied Chemistry* and the complete text of recent issues of *Chemistry International*.
- Mailing lists have been set up to allow communication by e-mail with members of IUPAC bodies, National Adhering Organizations and other groups affiliated with IUPAC.
- Twenty-three reports and recommendations were published in *Pure and Applied Chemistry*.
- Twenty-seven Sponsored Symposia and Conferences were held in 1998.
- New editions of the Compendium of Chemical Terminology and the Compendium of

Report of IUPAC Activities 1998

the Terminology of Analytical Chemistry were published.

- Six books were published in 1998.
- The proceedings of 16 IUPAC sponsored symposia and conferences were published in *Pure and Applied Chemistry*.
- The proceedings of six symposia were published in *Macromolecular Chemistry and Physics*.
- A project approval process was developed and approved and is being implemented in 1999.
- *Chemistry International* continues to be supplied at no charge to 395 chemists in 21 developing countries. A list of countries participating in this program is attached.
- IUPAC added three new National Adhering Organizations in 1998: the Chemical Society of Pakistan, the Colegio de Químicos de Puerto Rico and the Union of Yugoslav Chemical Societies.
- IUPAC added two new Observer organizations in 1998: the Sociedad Cubana de Quimica and the Pancyprian Union of Chemists.

Pure and Applied Chemistry

Reports and Recommendations

- Nomenclature of Phase Diagrams with particular reference to vapour-liquid and liquid-liquid (I.2)
Pure Appl. Chem. 70(11), 2233-2257 (1998)
- Spectroelectrochemistry - A Survey of in situ Spectrochemistry techniques (I.3)
Pure Appl. Chem. 70(7), 1395-1414 (1998)
- Guidelines for Presentation of Methodological Choices in the Publication of Computational Results. A. Ab Initio Electronic Structure Calculations (I.5)
Pure Appl. Chem. 70(4), 1015-1018 (1998)
- Specification of Components, Methods and Parameters in Fourier Transform Spectroscopy by Michelson and Related Interferometers (I.5)
Pure Appl. Chem. 70 (10), 2039-2045 (1998)
- Recommendations for the Presentation of NMR Structures of Proteins and Nucleic Acids (I.7)
Pure Appl. Chem. 70(1), 117-142 (1998)
- History of the recommended atomic-weight values from 1882 to 1997: A comparison of differences from current values to the estimated uncertainties of earlier values (II.1)
Pure Appl. Chem. 70(1), 237-257 (1998)
- Isotopic Compositions of the Elements 1997 (II.1)
Pure Appl. Chem. 70(1), 217-235 (1998)
- Nomenclature of Fused and Bridged Fused Ring Systems (III.1)
Pure Appl. Chem. 70(1), 143-216 (1998)
- Phane Nomenclature: Part I-Revised (III.1)
Pure Appl. Chem. 70(8), 1513-1545 (1998)
- Guidelines for publication of research results from empirical force field calculations (III.2)
Pure Appl. Chem. 70 (10), 2047-2049 (1998)
- Definitions of Terms Relating to the Non-Ultimate Mechanical Properties of Polymers (IV.1)
Pure Appl. Chem. 70(3), 701-754 (1998)
- Critically-Evaluated Propagation Rate Coefficients in Free Radical Polymerizations-II Alkyl Methacrylates (IV.2)
Pure Appl. Chem. 70(7), 1415-1418 (1998)
- Rheological and Mechanical Properties of poly(a-methylstyrene-co-acrylonitrile)/poly(methyl methacrylate) Blends in Miscible and Phase Separated Regimes of Various Morphologies. Part 1: Characterization of Constituents, Blend Preparation and Overview on Blend Morphology (IV.2.1)
Pure Appl. Chem. 70(8), 1547-1566 (1998)
- Guidelines for Calibration in Analytical Chemistry -Part 1: Fundamentals and Single Component Calibration (V.1)
Pure Appl. Chem. 70(4), 993-1014 (1998)
- Determination of Tin species in environmental samples (V.2)
Pure Appl. Chem. 70 (10), 2051-2064 (1998)
- The Determination of Iodine Species in Environmental and Biological Samples (V.2)

IUPAC Publications - 1998

Pure Appl. Chem. 70(8), 1567-1584 (1998)

The Determination of Mercury Species in Environmental and Biological Samples (V.2)

Pure Appl. Chem. 70(8), 1585-1615 (1998)

Nomenclature, Symbols, Units and Their Usage in Spectrochemical Analysis - XIV. Laser-based Atomic Spectroscopy: Proposal for a New Notation (V.4)

Pure Appl. Chem. 70(2), 517-526 (1998)

Analytical Aspects of Chemically Modified Electrodes: Classification, Critical Evaluation and Recommendations (V.5)

Pure Appl. Chem. 70(6), 1301-1318 (1998)

pH measurements in non-aqueous and mixed solvents: predicting pH(PS) of potassium hydrogen o-phthalate for alcohol-water mixtures (V.5)

Pure Appl. Chem. 70(7), 1419-1422 (1998)

Bound Xenobiotic Residues in Food Commodities of Plant and Animal Origin, Pesticides report 40 (VI.4)

Pure Appl. Chem. 70(7), 1423-1447 (1998)

Glossary of Terms used in Medicinal Chemistry (VII.M.1)

Pure Appl. Chem. 70(5), 1129-1143 (1998)

-Natural and Anthropogenic Environmental Oestrogens: the Scientific Basis for Risk Assessment

Pure Appl. Chem. 70 (9), 1617-1865 (1998)

Conferences

Biodiversity and Bioresources-Conservation and Utilization, International Conference on

Pure Appl. Chem. 70(11), 2065-2146 (1998)

Bioinorganic Chemistry, 8th International Conference on (ICBIC 8)

Pure Appl. Chem. 70(4), 855-991 (1998)

Bioorganic Chemistry, 4th International Symposium on (ISBOC-4)

Pure Appl. Chem. 70(1), 1-116 (1998)

Chemical and Biological Thermodynamics, International Conference on

Pure Appl. Chem. 70(3), 579-700 (1998)

Chemistry of Natural Products, 20th IUPAC Symposium on

Pure Appl. Chem. 70(2), 259-438 (1998)

CHEMRAWN XI Latin American Symposium on Environmental Chemistry

Pure Appl. Chem. 70(12), 2259-2336 (1998)

Coordination Chemistry, 32nd International Conference on

Pure Appl. Chem. 70(4), 755-854 (1998)

Degradation Processes in the Environment, International Conference on

Pure Appl. Chem. 70(7), 1319-1394 (1998)

High Temperature Materials Chemistry, 9th International Conference on (HTMC IX)

Pure Appl. Chem. 70(2), 439-515 (1998)

Medicinal Chemistry Symposium, AFMC International (AIMECS 97)

Pure Appl. Chem. 70(3), 527-577 (1998)

Organic Synthesis, 12th International Conference (12-ICOS)

IUPAC Publications - 1998

Pure Appl. Chem. 70(8), 1449-1512 (1998)

Organometallic Chemistry directed Towards Organic Synthesis, 9th International Symposium on (OMCOS-9)

Pure Appl. Chem. 70(5), 1019-1128 (1998)

Photochemistry, XVII IUPAC Symposium on

Pure Appl. Chem. 70(11), 2147-2232 (1998)

Physical Organic Chemistry, 14th International Conference (ICPOC-14)

Pure Appl. Chem. 70(10), 1933-2040 (1998)

Plasma Chemistry, 13th International Symposium on (ISPC-13)

Pure Appl. Chem. 70(6), 1145-1228 (1998)

Polymer Science and Technology (Macro'98)

Pure Appl. Chem. 70(6), 1229-1298 (1998)

Solubility Phenomena, 8th International Symposium on

Pure Appl. Chem. 70(10), 1867-1932 (1998)

Supramolecular Science and Technology, 1st International Conference on (1-ICSS&T)

Pure Appl. Chem. 70(12), 2337-2408 (1998)

Macromolecular Symposia

38th Microsymposium on Recycling of Polymers, Prague, Czech Republic, July 14-17, 1997

Macromolecular Symposia Vol. 135, 1998

International Symposium on Ionic Polymerization; Paris, France, July 7-11, 1997

Macromolecular Symposia Vol. 132, 1998

7th International Symposium on Macromolecule-Metal Complexes; Noorwijkerhout, the Netherlands, October 6-10, 1997; Ed. Driessens, W.L.

Macromolecular Symposia Vol. 131, 1998

International Symposium on Molecular Architecture for Degradable Polymers: Molecular Design of Polymeric Materials of Tomorrow; Stockholm, Sweden, June 10-13, 1997; Eds.

Albertsson, A.-C. and Karlsson, S.

Macromolecular Symposia Vol. 130, 1998

12th Bratislava IUPAC International Conference on Polymers: Modified Polyolefins for Advanced Polymeric Materials; Bratislava, Slovak Republic, August 25-28, 1997; Ed.

Borsig, E.

Macromolecular Symposia Vol. 129, 1998

IUPAC International Symposium on New Approaches in Polymer Synthesis and Macromolecular Formation; St. Petersburg, Russia, June 16-20, 1997; Eds. Bilibin, A.Yu. and Skorokhodov, S.S.

Macromolecular Symposia Vol. 128, 1998

Books

Atmospheric Particles, Series on Analytical and Physical Chemistry of Environmental Vol. 5;

Harrison, R.M. and van Grieken, R.; John Wiley & Sons, 1998 [ISBN 0-471-95935-9]

Compendium of Analytical Nomenclature (definitive rules 1997) - The Orange Book, 3rd edition;

IUPAC Publications - 1998

Inczedy, J.; Lengyel, T. and Ure, A.M.; Blackwell Science, 1998 [ISBN 0-86542-6155]

IUPAC Handbook 1998-99; Blackwell Science, 1998 [ISBN 0-63205-2767]

Nonlinear Spectroscopy for Molecular Structure Determination; Field, R.W.; Hirota, E.; Maier, J.P. and Tsuchi S.; Blackwell Science, 1998 [ISBN 0-632-04217-6]

Principles of Chemical Nomenclature: a Guide to IUPAC Recommendations; Leigh, G.J.; Favre, H.A. and Metanowski, W.V.; Blackwell Science, 1998 [ISBN 0-86542-6856]

Structure and Surface Reactions of Soil Particles, Series on Analytical and Physical Chemistry of Environmental Vol. 4; Huang, P.M.; Senesi, N. and Buffle, J.; John Wiley & Sons, 1998 [ISBN 0-471-95936-7]

IUPAC Sponsored Conferences

1998 Calendar

Calorimetry and Chemical Thermodynamics, International Symposium on; Campinas, Brazil, 05-Apr-98

Carbohydrate Symposium, XIXth International; San Diego, CA USA, 09-Aug-98

Chemical Education: Chemistry and Global Environmental Change, 15th International Conference on; Cairo, Egypt, 09-Aug-98

Chemical Thermodynamics, 15th International Conference; Porto, Portugal, 26-Jul-98

Chemistry Conference in Africa, 7th International; Durban, South Africa, 06-Jul-98

CHEMRAWN XI Latin American Symposium on Environmental Chemistry; Montevideo, Uruguay, 15-Mar-98

Coordination and Organometallic Chemistry of Germanium, Tin and Lead, 9th International Conference on; Melbourne, Australia, 20-Sep-98

Coordination Chemistry, 33rd International Conference on; Florence, Italy, 31-Aug-98

Cuban Chemical Society, III International Congress; Havana, Cuba, 01-Dec-98

Degradation Processes in the Environment, International Conference on; Dubrovnik, Croatia, 24-May-98

Electrochemistry, 49th Annual Meeting of International Society on; Kitakyushu, Japan, 13-Sep-98

Excitonic Processes in Condensed Matter, Third International Conference on (EXCON'98); Boston, MA USA, 02-Nov-98

Heteroatom Chemistry, Fifth International Conference on; London, Ontario, Canada, 05-Jul-98

MACRO '98: 37th International Symposium on Macromolecules; Gold Coast, Australia, 13-Jul-98

Macromolecules: Mechanical Behavior of Polymeric Materials, 18th Discussion Conference of; Prague, Czech Republic, 20-Jul-98

Medicinal Chemistry, XVth International Symposium on; Edinburgh, Scotland, 06-Sep-98

Natural Products, 21st IUPAC Symposium on Chemistry of; Beijing, China, 11-Oct-98

Novel Aromatic Compounds, 9th International Symposium on (ISNA-9); Hong Kong, China, 02-Aug-98

Organic Synthesis, 12th International Conference (12-ICOS); Venice, Italy, 28-Jun-98

Pesticide Chemistry, 9th IUPAC International Congress on; London, UK, 02-Aug-98

Photochemistry, XVII IUPAC Symposium on; Sitges, Spain, 19-Jul-98

Physical Organic Chemistry, 14th International Conference (ICPOC-14); Florianopolis, Brazil, 16-Aug-98

Polymer Science and Technology (Macro'98), International Symposium on Advances in; Madras, India, 05-Jan-98

Solubility Phenomena, 8th International Symposium on; Niigata, Japan, 05-Aug-98

Supramolecular Science and Technology, 1st International Conference on (1-ICSS&T); Zakopane, Poland, 27-Sep-98

Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, 1st International Conference on; Neuherberg/Munich, Germany, 04-May-98

IUPAC Sponsored Affiliate Members Program

Asociación Química Argentina	Argentina	21
Ateneo de Manila University	Philippines	25
Bangladesh Chemical Society	Bangladesh	25
Brazilian Chemistry Committee for IUPAC	Brazil	1
Chemical Society of Cameroon	Cameroon	10
Chemical Society of Ethiopia	Ethiopia	25
Chemical Society of Nepal	Nepal	25
Chemical Society of Pakistan	Pakistan	25
Chemical Society of the West Indies-Trinidad	Trinidad	25
Chemical Society of Uruguay	Uruguay	6
Chemical Society of West Indies - Jamaica	Jamaica	15
Chinese Chemical Society	China	25
Colegio Panameño de Químicos	Panama	25
Ghanaian Chemical Society	Ghana	25
Indian National Science Academy	India	14
Institute of Chemistry, Ceylon	Sri Lanka	17
Pontifica Universidad Católica del Ecuador	Ecuador	7
Roumanian Academy of Chemical Sciences	Romania	25
Sociedad Chilena de Química	Chile	9
Sociedad Cubana de Química	Cuba	25
Türkiye Kimya Dernegi	Turkey	20
		395